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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/802,759

03/18/2004

Tae-kyun Kim

46055

4697

1609

7590

03/14/2007

ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.

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EXAMINER

MRUK, GEOFFREY S

ART UNIT

PAPER NUMBER

2853

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/802,759

Applicant(s)

KIM ET AL.

Examiner

Geoffrey Mruk

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 10-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller (US 4,340,897).

With respect to claim 1, Miller discloses a maintenance method (Column 4, lines 50-61) for an inkjet printer (Column 1, line 11) comprising:

- wiping (Fig. 1, element 13) a nozzle surface (Fig. 1, element 11A) of a print head with a wiper (Fig. 1, element 19a),
- blocking the nozzle surface from outside (Fig. 1, element 19; Column 3, lines 59-63), and
- cleaning the print head (Fig. 1, elements 14, 19b).

With respect to claim 2, Miller discloses the blocking step comprises capping the nozzle surface (Fig. 1, element 19; Column 3, lines 59-63).

With respect to claim 3, Miller discloses the step of cleaning the print head (Fig. 1, element 11) comprises cleaning with an absorption member (Fig. 1, element 19b; Column 3, line 59 - Column 4, line 10) adapted to absorb remaining ink.

With respect to claim 4, Miller discloses the absorption member (Fig. 1, element 19b) performs the cleaning operation while moving along (Fig. 1, element 13) the print head excluding the blocked nozzle surface (Fig. 1, element 11A).

With respect to claim 5, Miller discloses the step of cleaning the print head (Fig. 1, element 11) comprises cleaning the print head with a cleaning arm (Fig. 1, element 19b), which is moved along the print head (Fig. 1, element 13).

With respect to claim 6, Miller discloses the nozzle surface of the print head (Fig. 1, element 11) is blocked (Fig. 1, element 19) as the wiper (Fig. 1, element 19b) is positioned in line with a side of the print head.

With respect to claim 7, Miller discloses the step of cleaning the print head (Fig. 1, element 11) comprises cleaning the print head with an absorption member (Fig. 1, element 19b; Column 3, line 59 - Column 4, line 10) adapted to absorb remaining ink.

With respect to claim 8, Miller discloses the absorption member (Fig. 1, element 19b; Column 4, lines 1-10) performs the cleaning operation (Fig. 1, element 13) while moving along the print head (Fig. 1, element 11).

With respect to claim 9, Miller discloses the step of cleaning the print head (Fig. 1, element 11) comprises cleaning the print head with a cleaning arm (Fig. 1, element 19b) adapted to move along (Fig. 1, element 13) the print head.

Response to Arguments

Applicant's arguments filed 8 December 2006 have been fully considered but they are not persuasive. The applicant's argument that "However the brush structure of

Art Unit: 2853

Miller is a porous and unitary structure which does not permit blocking of the nozzle surface and cleaning of the print head. Miller does not, therefore, teach or suggest wiping a nozzle surface of a print head with a wiper, blocking the nozzle surface from outside, and cleaning the print head, as claimed in claim 1", is not persuasive.

However, the examiner reminds applicant that USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure (MPEP 2111). Therefore, Miller meets the claimed limitation "blocking the nozzle surface from the outside, and cleaning the print head."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2853

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey Mruk whose telephone number is 571 272-2810. The examiner can normally be reached on 7am - 330pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GSM
3/2/2007



STEPHEN MEIER
SUPERVISORY PATENT EXAMINER